



Course Syllabus

HONOR 301H (3.0 credits) Fall 2009

The Role of Knowledge in Society

Penn State Brandywine

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Office hours for Dr. Guertin: 8:30AM–9:30AM, 11:30AM-12:30PM Mon. and Wed.

Office hours for Dr. Goldschmidt: 10:30-11:30AM, 12:30-1:30PM Mon. and Wed.

Lecture: MWF 1:30-2:20PM in TMZKO 101. Periodic class meetings during common hour, mandatory fieldtrip on Thursday, October 15.

REQUIRED Readings: all placed in ANGEL and/or distributed in class, Innovation Nation: How American is Losing Its Innovative Edge, Why it Matters, and What We Can Do To Get It Back by John Kao (Free Press, 2007, ISBN: 978-1416532682)

What's in store for you... For the majority of you enrolled in this seminar, this is your first academic approach to the topic of innovation. The topics we will cover will be in the context of creative thinking and approaches, and how to institute sustained change for local-to-international issues. You will be developing your professional skills: writing abstracts, manuscripts and preparing oral and poster presentations. You will learn how to target the presentation of material to specific audiences and learn how to use several mediums of communication effectively, from the written word to multimedia productions. At the end of this course, you will have a toolkit of resources to bring with you into your professional life, as well as a deeper appreciation and understanding of the need for innovation.

*****Students are responsible for their own learning!!!***** We are here to help facilitate your education to the best of our ability, but you must do your part as well. It is up to YOU to come to class, to take notes, to ask questions, to complete assignments and readings by deadlines, and to be an active learner! It is up to YOU to take advantage of the education we are providing.

Now for all the necessary, important information....

Our expectations of you...

We expect every student to come to all class sessions on time and to be prepared. You should have read the corresponding chapters and readings in your book and have completed the ANGEL assignments BEFORE coming to class. We encourage everyone to ask questions and to work with your classmates. Because there will not be traditional assignments in this class, your attendance and participation will impact your performance and grade.

- **Classroom Etiquette**

Let's work together on this one. Please do not have conversations with other students while we are leading a discussion or while your peers are responding to questions. No passing notes, no reading the newspaper. **If we find that anyone is being too disruptive or too disrespectful to the students or instructors, we reserve the right to dismiss you from the classroom.** You will then have to speak to one of the instructors privately before we will allow you back into the class. **Do NOT get up and leave the group while we are in session.** We will be having class discussions where we want you to volunteer your interpretation and opinion on certain issues will be required. Be open, be honest, and show respect for the opinions of your classmates. The class will be much more enjoyable if we show respect for one another!

- **A note on cell phones** There is no reason a cell phone should be on during our meeting times. Turn your cell phones off **before** lecture begins.

- **ANGEL**

ANGEL will be used in this course. If you are not familiar or comfortable with ANGEL, please review the online ANGEL tutorials to learn how to most effectively use Penn State's course management software (<http://www.berks.psu.edu/StudentServices/IT/ANGELabout.htm>). There will be several folders and links for you to access relating to various class discussions and assignments. You will not survive this course if you don't use ANGEL.

You must access your Penn State email as well. PSU email is the designated form of official communication between Penn State faculty and their students. We will be making use of email as reminders for deadlines, follow-ups to classroom discussions, clarifications on assignments, etc. We will not send useless messages – only ones that directly relate to the class and to assist your learning. All emails we send to the entire class will be done through the ANGEL email system.

- **Late Assignments**

All assignments must be turned in **on time** – absolutely no assignments will be accepted late. **Do not use “computers” as an excuse for not turning in an assignment on time** (such as the jump drive ate my paper, I couldn't log in from home, AOL was down, etc.). You will be given more than enough time to complete

and turn in assignments; we will not make exceptions if you wait until 5 minutes before an assignment is due to hand it in.

Unless we tell you otherwise, all assignments will be turned in via ANGEL. DO NOT place paper copies of assignments in our campus mailboxes or under our office doors. We will not be responsible for assignments not turned in via ANGEL. We will not give any makeup assignments, for this is not fair to everyone that is ready to participate in class and hand in everything on time.

- **Final Exam**

This course will not have a cumulative final exam. See the “Grading” section for how your course grade will be determined at the end of the semester.

What you can expect of your instructors...

We will be prepared each meeting day, and we will keep you updated if there are to be any changes to the syllabus (for example, if the class wants to explore a topic further, we will be flexible!). We will make ourselves available during and outside of class to answer any questions you may have – don’t hesitate to ask anything! **We are here to help you *IF* you put in the effort and work yourself!** We will not only teach you “the material” but why we are teaching it and the applicability of this course to your everyday lives.

Note to students with disabilities

In accordance with the American with Disabilities Act of 1990, it is Penn State’s policy to provide reasonable academic adjustments for students with documented disabilities. If you have a disability-related need for modifications in this course, contact Sharon Manco, 610-892-1461, Vairo Building, sam26@psu.edu. This notification should occur by the end of the first week of the semester. Students may visit www.equity.psu.edu/ods/ for complete information.

H1N1 influenza statement

Special Fall 2009 Flu Protocols - In compliance with Pennsylvania Department of Health and Centers for Disease Control recommendations, students should NOT attend class or any public gatherings while ill with influenza. Students with flu symptoms will be asked to leave campus and stay home during recovery. The illness and self-isolation period will usually be about a week. It is very important that individuals avoid spreading the flu to others. Immediately contact your instructors if you contract the flu and must miss class. Accommodations will be made to keep you on top of your work, and a doctor’s note is not necessary during your absence.

Grading

Your grade in HONOR 301H will be based on a percentage system.

- **5% - Letter to Department of Education**
- **15% - Innovation Nation Questions**
- **20% - Book Project**
- **20% - Solar Decathlon Multimedia Project**
- **25% - Sustainable Solution Project**
- **15% - Class Participation (includes Voices of Innovation reflections)**

The final grades will be assessed at the end of the semester as follows (% of total pts):

A = 96 to 93; A- = 92 to 90; B+ = 89 to 87; B = 86 to 83; B- = 82 to 80;

C+ = 79 to 77; C = 76 to 70; D = 69 to 60; F = 59 and below

**** Do not expect us to drop any grades or curve any grades during or at the end of the semester. Extra credit is not available.***

Academic Integrity

All students are expected to act with civility, personal integrity; respect other students' dignity, rights and property; and help create and maintain an environment in which all can succeed through the fruits of their own efforts. An environment of academic integrity is requisite to respect for self and others and a civil community.

Academic integrity includes a commitment to not engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty include cheating or copying, plagiarizing, submitting another persons' work as one's own, using Internet sources without citation, fabricating field data or citations, "ghosting" (taking or having another student take an exam), stealing examinations, tampering with the academic work of another student, facilitating other students' acts of academic dishonesty, etc.

Students charged with a breach of academic integrity will receive due process and, if the charge is found valid, academic sanctions may range, depending on the severity of the offense, from F for the assignment to F for the course.

The University's statement on academic integrity, from which the above statement is drawn, is available at: <http://www.psu.edu/dept/oue/aappm/G-9.html>

OK, so **WHAT DOES THIS ALL MEAN... DO NOT EVEN THINK OF CHEATING!!!** Do not copy from your fellow students, do not plagiarize (from books, the internet, from yourself, etc.). We will vigorously pursue any suspicions we have of academic integrity violations! If we suspect a violation, we will first have an informal conversation with you to discuss the issue. Then, depending on the outcome of that conversation, we will have another conversation with you that requires us both to sign an academic integrity report form that will be turned in to the campus academic integrity committee. We will determine what we feel is appropriate punishment for your violation of PSU's academic

integrity policy. The sanction may be from failing the assignment to failing the course, depending on the severity of the violation. If found guilty of violating Penn State's academic integrity policy, you may be dismissed from the Cooper or Schreyer Honors Programs (see honors student handbook).

Breakdown of topics covered during each class meeting

** note that this syllabus is subject to change with prior notification*

Readings are to be completed BEFORE coming to the NEXT lecture. In addition to your textbook, readings will also be placed in ANGEL – it is your responsibility to check the folders in ANGEL corresponding to each week for the readings (if applicable).

► **Week 1** READ in Innovation Nation: Introduction and Chapter 1

M, 08/24: Introduction to terminology and the toolkit

ASSIGN: Questions for the Introduction and Ch. 1 in Innovation Nation

W, 08/26: Academic and professional integrity, ethics in Web 2.0 communications

DUE (Thursday, 11PM): Answers to questions for Introduction and Ch. 1 in Innovation Nation

F, 08/28: UN Millennial Development Goals, Three Cups of Tea and universal primary education

ASSIGN: Questions for Chapters 2 & 3 in Innovation Nation

► **Week 2** READ in Innovation Nation: Chapters 2 & 3

M, 08/31: Primary education in Afghanistan

W, 09/02: Innovative programming in education

DUE (Thursday, 11PM): Answers to questions for Chapters 2 & 3 in Innovation Nation

F, 09/04: Department of Education – who are they?

ASSIGN: Department of Education letter

ASSIGN: Questions for Chapters 4 & 5 in Innovation Nation

► Week 3 READ in Innovation Nation: Chapters 4 & 5

M, 09/08: NO CLASS (Labor Day)

W, 09/10: Review of book project

ASSIGN: Book project

DUE (Thursday, 11PM): Answers to questions for Chapters 4 & 5 in Innovation Nation

F, 09/12: Talking and listening exercises

ASSIGN: Questions for Chapters 6 & 7 in Innovation Nation

DUE (Friday, 11PM): Department of Education letter

► Week 4 READ in Innovation Nation: Chapters 6 & 7

M, 09/14: Continuation of listening exercises (audio files)

W, 09/16: What is research and creative accomplishment? (qualitative vs. quantitative)

ATTEND (Thursday, 11:30AM): Open mic for Constitution Day (Vairo Courtyard)

DUE (Thursday, 11PM): Answers to questions for Chapters 6 & 7 in Innovation Nation

F, 09/18: Service with a younger audience, with a focus on huggy pillows

ASSIGN: Questions for Chapter 8 & 9 in Innovation Nation

► Week 5 READ in Innovation Nation: Chapter 8 & 9.

M, 09/21: Poster presentations – the parts, focusing on titles

W, 09/23: Book making workshop (*report to class at 1PM)

DUE (Thursday, 11PM): Answers to questions for Chapters 8 & 9 in Innovation Nation

F, 09/25: What is an abstract

ASSIGN: Questions for Chapter 10 & Epilogue in Innovation Nation

► Week 6 READ in Innovation Nation: Chapter 10 & Epilogue.

M, 09/28: Reflection and discussion of teaching democracy and voting to our youth
ATTEND (Monday, 12:30PM): Freedom Foundation of Valley Forge (LCR)

W, 09/30: Solar Decathlon Assignment
ASSIGN: Solar Decathlon Multimedia project

DUE (Thursday, 11PM): Answers to questions for Chapter 10 in Innovation Nation

F, 10/02: Multimedia mash-ups, creative commons, copyright law

► Week 7 Research and ethics.

M, 10/05: IRB

W, 10/07: Digital Commons training

F, 10/09: Research and ethics

► Week 8 Solar Decathlon visit

M, 10/12: Present your book, the “ah” counter
DUE (in class at 1:30PM): Book project

W, 10/14: Analysis of posters, view the past Solar Decathlon poster

R, 10/15: Required fieldtrip to the Solar Decathlon, leave campus at 7AM, return 7PM

F, 10/16: Discussion of DC trip

► Week 9 Different types of professional publications

M, 10/19: Journals and magazines

W, 10/21: What is a manuscript? The format of a paper.

F, 10/23: Reflection and discussion of children's literacy

ATTEND (Friday, 12:30PM): Seminar – First Book Philadelphia (LCR)

► **Week 10** Funding educational initiatives

M, 10/26: Discussion, tie back into Three Cups of Tea

W, 10/28: Meet in final project groups, hand in progress report by end of class

F, 10/30: Session by Lisa Wiedemer, Grants Manager, Office of Commonwealth Campuses

► **Week 11** Solar Decathlon working week

M, 11/02: How to make a poster

W, 11/04: Solar Decathlon working day

F, 11/06: Share Solar Decathlon projects during class, how can we connect this with universal primary education?

DUE (in class at 1:30PM): Solar Decathlon project

► **Week 12** Working in groups for universal primary education

M, 11/09: Group poster and manuscript working session

W, 11/11: Digital Commons video training for SPARKY/final project
<http://digitalcommons.psu.edu/sparkyawards>

F, 11/13: Reflection and discussion of art and literacy

ATTEND (Friday, 12:30PM): Seminar – SpiralQ Puppet Theater (LCR)

DUE (11:00PM in ANGEL): Group manuscript for Sustainability Project

Sunday, 11/14: **DUE (11:00PM in ANGEL):** Group poster for Project

▶ Week 13 Peer review

M, 11/16: Peer review of manuscripts

W, 11/18: Peer review of manuscripts

F, 11/20: Completed peer reviews due at beginning of class, groups meet to review the reviews, discussion of how to effectively use peer reviews

▶ Week 14 Sustainability project work

M, 11/30: Groups work on revision of manuscript

W, 12/02: Speaking exercise

F, 12/04: The process of working with people

DUE (in ANGEL at 1:30PM): Revised manuscript and SPARKY video on CD

▶ Week 15 Where do we go from here...

M, 12/07: Evaluating the innovations of your peers

W, 12/09: Where do we go from here – an innovation nation

F, 12/11: Where do we go from here – as honors scholars

Explanation of the Innovation Nation Questions

Readings and responses outside of class

You will be responsible for reading chapters in your textbook and answering questions based on the material in each chapter. The questions you will answer are not meant to repeat information presented in the chapter but are designed for you to think critically, use your own thoughts and opinions and synthesize the information. There will be links in ANGEL to the online forms to submit your responses to each question. You must complete the answers to the questions by the deadlines to receive credit. **SUBMISSIONS ARE NOT ACCEPTED LATE!**

How the “grading” will work

We will be looking for complete answers with a complete thought. One- or two-sentence responses for each question are not acceptable. Do not plagiarize – you should reference your sources if you take material verbatim from a source, but we do not want to see entire text passages as your response. Put your answers in your own words. Your final grade for the chapter questions will be a percentage of your final grade. You will have 3 questions for each chapter, and each question will be scored from 0 to 3.

- **Score 0** = you respond that you do not know how to answer the question, or you leave it blank (shows no effort).
- **Score 1** = you try to answer the question but show minimal accurate knowledge and/or substantial misconceptions about concept. You do not use any information from the readings to answer the question (minimal effort, incorrect answer).
- **Score 2** = you show some accurate knowledge and may use correct terminology to answer the question. However, you do not use appropriate information from the readings to answer the question (partially correct, but still incomplete/not fully answered).
- **Score 3** = you answer the question correctly and completely. You incorporate information from the readings into the answer. You may have looked for the answer outside of the class (on the web, etc.).

You will not receive credit if you do not get your online responses in on-time. There are no make-ups and no excuses allowed for missing the submission deadline. Pay careful attention to the due dates for each chapter!

Example to get you started with Innovation Nation Questions

Read through the front and back book jacket to Innovation Nation. Let's say you have been assigned to answer the question: *Why is the United States not considered an Innovation Nation?* Below we've included sample responses and how we would score each one.

Score 0 -- Americans are lazy and just aren't as smart as people in other countries. All technology innovations come from abroad (cell phones, for example). We are spending too much money on the war so there isn't any money left to spend on new, everyday inventions. There's nothing that can be done about this.

Why this question is scored 0: inaccurate information, no examples from text, last statement directly conflicts with information in book, the response does not answer the question being asked

Score 1 -- "The country is losing its edge in economic leadership." Scientists are leaving this country for countries doing more with innovation. Personally, I think this is a tragedy.

Why this question is scored 1: there is information from the text, the response is starting to answer the question but only one part of the entire story, not enough details to answer the question, no examples - unclear, and too brief

Score 2 -- Individuals and nations have the ability to control growth and competition. The United States has the ability to jump right back into the game to protect our national security. If we move fast, the United States can generate a plan to be more focused and creative.

Why this question is scored 2: many relevant points are mentioned that has this response on the right track, but it still misses the point as to what the question is asking, the topics are all over the place, not connected and ideas not well developed, no personal opinion or interpretation

Score 3 -- John Kao introduces us to many ideas and potential sources as to why the United States has lost its competitive edge. It goes back to who has well-developed centers of innovation. He gives examples of how the reverse brain drain, combined with the war in Iraq, has eroded the American competitiveness in innovation and overall standing in the world community. The good news is that Dr. Kao believes it is not too late, that we can "secure a leadership role in the twenty-first century" (front cover). He certainly does not begin the book on a happy note. I am very curious to hear his thoughts and ideas on how we can reverse the lack of innovation in the United States and make a difference, because I really wonder if it is possible to initiate a national innovation strategy to make us competitive again on a global scale.

Why this question is scored 3: this response is very complete, touches on all points mentioned in the text that directly relate to the question being asked, gives specific examples, includes personal opinion

Innovation Nation Questions by Chapter

(*Remember that you need to have submitted your answers to all of these questions in ANGEL each week by 11PM on the designated due dates.)

Introduction

- 1) What is an Innovation Nation? Why doesn't Kao consider America to be one?
- 2) In your own words, describe Kao's epiphanies. Do you agree? Why/why not?
- 3) The American Competitiveness Initiative (ACI) calls for a fresh approach to three areas of innovation challenges: more basic research (supercomputing, alternative energy, nanotechnology), a permanent business tax credit for R&D spending, and a push to train 70,000 additional high school science and math teachers. Come up with your own list of three innovation challenges for American, and justify why your three are more significant and better developed ideas than the ones included in the ACI.

Chapter 1

- 1) In your own words, summarize the four versions of innovation through our nation's history.
- 2) Besides science and technology, what else is necessary for innovation? Give an example of a social innovation not listed in the book and describe.
- 3) Should the United States focus on incremental innovations, game-changing innovations, or innovation applied to a wicked problem? Explain your thoughts.

Chapter 2

- 1) Kao reports: "more American university degrees are said to be awarded in parks, recreation, leisure, and fitness studies than in all foreign languages and literatures combined." Why is this a problem and challenge for creating young innovators and innovative ideas? Isn't this balanced by the pressures to find solutions for issues in environmental science and human health?
- 2) In the United States, why don't we see potential innovators in the K-12 and college-level populations?
- 3) What are other countries doing to foster innovators and innovation that the USA is not doing?

Chapter 3

- 1) What are the similarities and differences between the innovation nations of Singapore, Denmark, and China?
- 2) In your own words, define the four principal driving factors behind the global evolution of innovation centers. Which factor do you feel has the most influence and why?
- 3) In the Polk family scenario, Jim reflects that, "the real educational revolution had taken place inside the minds and hearts of the teachers and students." What do you think Jim means when he says this? What would it take for this to occur today?

Chapter 4

- 1) Why do you think Singapore has its National Library as a symbol of innovation? Could we have a library as a national symbol in the United States? Explain.
- 2) Kao reports that, “jobs demanding technical competencies are growing at three times the rate of jobs in general.” So why aren’t more students pursuing technical jobs?
- 3) What are your thoughts about In2Books/ePals Classroom Exchange. Can this program really be effective in fostering innovation in our youth? Would it be effective in higher education? Explain.

Chapter 5

- 1) The chapter opens with a United States college team finishing as, “the worst of the best of the best.” Should this be a concern that American university students are not competitive against their global peers? What impact do you think this loss had on the individual students?
- 2) In your own words, describe the characteristics “brainy innovators” are looking for in a geographic location to settle down. Does Philadelphia offer any of these desirable characteristics?
- 3) Why are foreign talents leaving the United States? Is it the same reason American scientists are leaving the United States? Explain.

Chapter 6

- 1) Besides Starbucks, can you name three other places that you think serve as dream spaces? What have you observed in these dream spaces that has you classify them as such?
- 2) How are dream space technologies such as Second Life and simulation/gaming software fostering innovation – or are they? Explain.
- 3) If you could create a dream space for yourself on campus, what would it be? Where would it be located? Why?

Chapter 7

- 1) In your own words, summarize how openness, transparency, and diversity foster innovation.
- 2) Are mash-ups really an innovation or just a reworking of existing technologies? Explain and support your viewpoint with an example.
- 3) Jay Rosen describes the shift occurring in the media with the phrase, “the people formerly known as the audience.” How have web-based technologies (wikis, blogs, podcasts, MySpace, RSS feeds, etc.) changed the audience for television, newspapers, and radio?

Chapter 8

- 1) What are the benefits and drawbacks of establishing clusters for innovation?
- 2) What are the characteristics and qualities needed for a leader or heavyweight champion of an Innovation Hub?
- 3) The Morrill Act of 1862 gave rise, eventually, to Penn State University. Does this, by definition, make Penn State an institute for innovation? Do you feel Penn State today is a center of innovation? Explain.

Chapter 9

- 1) In your own words, describe Kao's three-pronged agenda for America to be an Innovation Nation.
- 2) How does art, humanities, language – our overall “cultural intelligence” – fit into the National Innovation Agenda? Why are these components necessary to include?
- 3) What is the role of the individual citizen in Kao's National Innovation Agenda?

Chapter 10

- 1) What is the purpose and sense of mission for the United States? In your opinion, what should it be?
- 2) Why does the United States need to be an Innovation Nation in this Innovation World?
- 3) In your opinion, if all we focus on is winning in the short term and embracing risk aversion, what is it going to take for everyday citizens, including yourself, for America to be an Innovation Nation?